

REMARKS

Claims 1-16 remain in this application. Reconsideration of the application is requested.

The control valve 8 is now mentioned in paragraph 30 of the specification as a result of the amendments set forth above, and the objections set forth in paragraphs 1 and 2 on page 2 of the Office Action have been overcome.

The informality referred to in section 3 on page 3 of the Office Action is eliminated by way of the claim amendments set forth above.

Independent claims 1 and 9 are rejected, along with dependent claims 2, 3, 6-8, 10, 11, and 14-16, as being anticipated by either European Patent Application EP 0 861 802 to Gonjo et al. or U.S. Patent 4,946,667 to Beshty. Claims 1 and 9 are also rejected, along with dependent claims 2, 3, 6, 10, 11, and 14, as being anticipated by either the English abstract of Japanese publication 4-187,502 to Kobayashi et al. or the English abstract of Japanese publication 3-199,102 to Yamamoto. Reconsideration of each of these rejections is requested.

Heat-transfer fins 27 and catalytic combustion portions 6a and 6b of the Gonjo et al. apparatus are considered by the Examiner to be at least part of "a normalizing stage." However, while these fins 27 and catalytic combustion portions 6a, 6b serve to minimize a stacked-direction temperature distribution in the reforming portion 4, as discussed, for example, from column 19, line 48 to column 20, line 1, nothing suggests that the Gonjo et al. fins and catalytic combustion portions equalize temperature valleys and peaks of a gas flow as claims 1 and 9 particularly require.

The Examiner considers "a portion of" the Beshty superheater coil 13 to be "a normalizing stage." Although the gaseous mixture contained in the coil 13 is superheated to a temperature of about 700° - 1,100°F in burner 14 and is supplied to the reformer 18 at a desired superheated temperature and a desired pressure as described in lines 27-48 in column 3 of the Beshty patent, nothing suggests that any portion of the superheater coil 13 equalizes temperature valleys and peaks of a gas flow as claims 1 and 9 particularly require.

Superheater 5 of the Kobayashi et al. fuel cell is considered by the Examiner to be "a normalizing stage." Nothing, however, suggests that the Kobayashi et al. superheater 5 equalizes temperature valleys and peaks of a gas flow as claims 1 and 9 particularly require; the uniform heating at the vaporizer 4 discussed in the "CONSTITUTION" portion of the Kobayashi et al. abstract is produced by the spiral combustion gas diffusion provided by plates 11A-11C.

Finally, the Examiner considers superheater 5 of the Yamamoto device to be "a normalizing stage." Although superheated gas in passage 14 is either heated by superheater 5 and then joined to raw gas from passage 15 or otherwise adjusted to an optimum temperature for a reforming reaction, nothing suggests that the Yamamoto superheater 5 equalizes temperature valleys and peaks of a gas flow as claims 1 and 9 define.

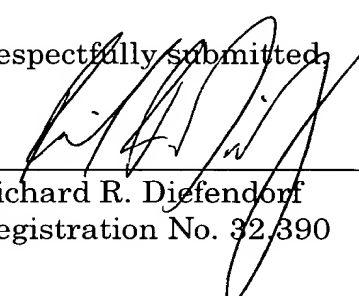
For reasons discussed above, neither currently amended claim 1 nor currently amended claim 9 is anticipated by any of the documents mentioned above, and the same documents are relied on in the rejection under 35 U.S.C. § 103(a) set forth in section 11 on page 5 of the Office Action. It is respectfully submitted, therefore, that both claim 1 and claim 9 are patentable. The rest of

the claims in this application are dependent claims and are submitted to be patentable as well.

This application is now in condition for allowance. Should the Examiner have any questions after consideration of this Reply, the Examiner is invited to telephone the undersigned attorney.

Date: October 20, 2004

Respectfully submitted,



Richard R. Diefendorf
Registration No. 32,390

CROWELL & MORING LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844
RRD:msy